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PTO/SB/21 (08-03)

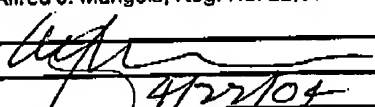
Approved for use through 08/30/2003. OMB 0651-0031  
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<b>TRANSMITTAL FORM</b> (to be used for all correspondence after initial filing)	Application Number	10/625,835
	Filing Date	07/23/2003
	First Named Inventor	Christopher R. SCHULZ
	Art Unit	
	Examiner Name	
	Attorney Docket Number	1620
Total Number of Pages In This Submission	17	

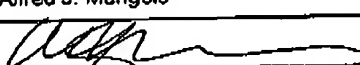
ENCLOSURES (Check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance communication to Technology Center (TC) <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) (please identify below):
Remarks		

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Alfred J. Mangels, Reg. No. 22,605
Signature	
Date	4/22/04

## CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name	Alfred J. Mangels		
Signature		Date	4/22/04

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PTO/SB/17 (10-03)

Approved for use through 07/31/2008. OMB 0651-0032

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# FEE TRANSMITTAL

## for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$162.00)

## Complete if Known

Application Number 10/625,835  
 Filing Date 07/23/2003  
 First Named Inventor Christopher R. SCHULZ  
 Examiner Name  
 Art Unit  
 Attorney Docket No. 1620

## METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None
☒ Deposit Account:
 Deposit Account Number  
 Deposit Account Name

501300

Alfred J. Mangels

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s) or any underpayment of fee(s)☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

## 1. BASIC FILING FEE

Large Entity Code (\$)	Small Entity Code (\$)	Fee Description	Fee Paid
1001 770	2001 385	Utility filing fee	
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	

SUBTOTAL (1) (\$)-0-

## 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Extra Claims	Fee from below	Fee Paid
49	-20-- = 18	x 9	= 162
Independent Claims	1	-3-- = 0	x 0 = 0
Multiple Dependent			= 0

Large Entity Code (\$)	Small Entity Code (\$)	Fee Description
1202 18	2202 9	Claims in excess of 20
1201 86	2201 43	Independent claims in excess of 3
1203 280	2203 145	Multiple dependent claim, if not paid
1204 86	2204 43	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$162)

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

## 3. ADDITIONAL FEES

Large Entity Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 63	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	2053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 420	2252 210	Extension for reply within second month	
1253 850	2253 475	Extension for reply within third month	
1254 1,480	2254 740	Extension for reply within fourth month	
1255 2,010	2255 1,005	Extension for reply within fifth month	
1401 330	2401 165	Notice of Appeal	
1402 330	2402 165	Filing a brief in support of an appeal	
1403 290	2403 145	Request for oral hearing	
1451 1,510	2451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,330	2501 665	Utility issue fee (or release)	
1502 480	2502 240	Design issue fee	
1503 640	2503 320	Plant issue fee	
1460 130	2460 130	Petitions to the Commissioner	
1807 50	2807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	2806 180	Submission of Information Disclosure Stmt	
8021 40	28021 40	Recording each patent assignment per property (times number of properties)	
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	
1802 900	2802 900	Request for expedited examination of a design application	

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)-0-

## SUBMITTED BY

Name (Print/Type) Alfred J. Mangels

Signature

Registration No. (Attorney/Agent)

22,605

(Complete if applicable)

Telephone 513-469-0470

Date

4/22/04

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This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

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PTO/SB/17 (10-03)

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for FY 2004**

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☒ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT (\$)** 162.00**Complete if Known**

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 First Named Inventor Christopher R. SCHULZ  
 Examiner Name  
 Art Unit  
 Attorney Docket No. 1620

**METHOD OF PAYMENT (check all that apply)**☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None☒ Deposit Account:

Deposit Account Number 501300  
 Deposit Account Name Alfred J. Mangels

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments  
☒ Charge any additional fee(s) or any underpayment of fee(s)  
☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

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1003 530	2003 285			Plant filing fee	
1004 770	2004 385			Reissue filing fee	
1005 160	2005 80			Provisional filing fee	

**SUBTOTAL (1) (\$)** -0-**2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

Total Claims 49 -20\*\* = 18 x 9 = 162  
 Independent Claims 1 -3\*\* = 0 x 0 = 0  
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**SUBTOTAL (2) (\$)** 162

\*\*or number previously paid, if greater; For Reissues, see above

**FEE CALCULATION (continued)****3. ADDITIONAL FEES****Large Entity Small Entity**

Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
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1808 180	2808 180	Submission of Information Disclosure Stmt	
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1802 900	2802 900	Request for expedited examination of a design application	

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

**SUBTOTAL (3) (\$)** -0-**SUBMITTED BY**

Name (Print/Type) Alfred J. Mangels

Signature

Registration No. (Attorney/Agent)

22,605

(Complete if applicable)

Telephone 513-469-0470

Date

4/22/04

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1620

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

OFFICIAL

In re application of ]

Christopher R. Schulz ]

Serial No.: 10/625,835 ]

Filing Date: July 23, 2003 ]

For: ULTRAVIOLET-LIGHT-BASED ]  
DISINFECTION REACTOR ]

Group Art Unit

Examiner:

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APR 26 2004

PRELIMINARY AMENDMENTCommissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Prior to examination, please amend the above-identified application  
as follows:

**Amendments to the Specification** - the specification is not being amended in this  
paper.

**Amendments to the Claims** are reflected in the listing of claims that begins on  
page 2 of this paper.

**Amendments to the Drawings** - the drawings are not being amended in this  
paper.

**Remarks** begin on page 13 of this paper.

-1-